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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/126,622	07/30/1998	CORMAC HERLEY	10970294-1	9131

7590 02/13/2003
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EXAMINER

VU, NGOC YEN T

ART UNIT PAPER NUMBER

2612

DATE MAILED: 02/13/2003

12

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/126,622

Applicant(s)

Cormac HERLEY

Examiner

Ngoc-Yen Vu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Nov 14, 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10-32 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 6) ☐ Other: _____

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Continued Prosecution Application

1. The request filed on 11/14/2002 for a Continued Prosecution Application (CPA) under 37 CFR 1.53(d) based on parent Application No. 09/126,622 is acceptable and a CPA has been established. An action on the CPA follows.

Response to Amendment

2. The amendments, filed on 09/16/2002, have been entered and made of record. Claims 10-32 are pending. In view of the Applicant's amendments to claims 14-17, 22, 25, 27 and 32, the objection and rejection of the above noted claims are hereby withdrawn.

Response to Arguments

3. Applicant's arguments with respect to claims 10-32, filed 09/16/2002, have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 10-11 and 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weldy et al. (US #6,181,826) in view of Saito (US #5,838,834).

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Claims 18-19 will be discussed first. Regarding claims 18-19, in figures 5, 7 and 8, Weldy '826 teaches a system of processing digital images comprising:

means for inputting a raw image (base image 16, image E/F/G/H, image AA-AN; col. 7 lines 44-62; col. 9 line 59 - col. 10 line 28);

means for generating from the raw image, including employing a first quantizing step, a first compressed image data set suitable for reproducing substantial the entire image at a first quality level (quantizer 30, base 8 bits 31; reconstruct image EF, spatially convert circuit 60A/60B; col. 7 line 44 - col. 9 line 14; col. 9 line 59 - col. 10 line 28; col. 15 line 43 - col. 16 line 44); and

means for generating from the raw image, including employing a second quantizing step independent of the first quantizing step, a second compressed image data set which when combined with the first compressed image data set reproduces substantially the entire image at a second, higher quality level (quantizers 32/34/36, base images 33/35/37, reconstruct image GH, reconstructed image 59, spatially convert 60C/60N, combine images 61 and reconstructed image 63; col. 7 line 44 - col. 9 line 14; col. 9 line 59 - col. 10 line 28; col. 15 line 43 - col. 16 line 44).

Claims 18-19 differs from Weldy in that the claim further requires that the system of processing images in a digital camera. However, it is well known in the art to process and compress digital images having different quantizing and coding steps in a digital camera, as taught in Saito. In the same field of endeavor, Saito '834 teaches a digital camera including a DCT (103), a quantizer (104) and a quantization table (105) for process and compress digital images

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which are stored in a compressed data memory (113) (see Fig. 4). In light of the teaching from Saito, it would have been obvious to one of ordinary skill in the art to include the system of processing digital images taught in Weldy in a digital camera in order to provide quality images as desired by the user.

Regarding claims 10-11, they are method claims corresponding to the apparatus claims 18-19. Therefore, claims 10-11 are analyzed and rejected as previously discussed with respect to claims 18-19.

5. Claims 12-17 and 20-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weldy '826 in view of Saito' 834, as applied to claims 10 and 18 above, and further in view of Yamagata (US #6,263,106).

Claims 20-25 will be discussed first. Claims 20-22 and 25 differ from Weldy, as modified by Saito, in that the claims further requires an image storage device for storing the first compressed image data set in a primary storage area and the second compressed image data set in a secondary storage area wherein if insufficient space is available in the image storage device to store the first compressed image data set, the second compressed image data sets will be released to make space in the image storage device. The limitations are well known in the art as shown in Yamagata. In the same field of endeavor, Yamagata '106 teaches a digital camera having image data selectively compressed and stored in a recording medium (IC card M). Yamagata further teaches that compressed image data can be selectively deleted to increase total capacity of the

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memory card (col. 1 lines 35+). In light of the teaching from Yamagata, it would have been obvious to one of ordinary skill in the art to modify the image processing apparatus taught in Weldy and Saito by allowing compressed image data to be selectively released so as increasing the total remaining capacity of the compressed data memory.

As to claims 23-24, Yamagata teaches a frame forward/backward buttons 15 (Fig. 1) allowing image files to be selected for further compression or deletion.

As to claims 12-17, they are method claims corresponding to the apparatus claims 20-25. Therefore, claims 12-17 are analyzed and rejected as previously discussed with respect to claims 20-25.

Regarding claims 26-29 and 32, the subject matter in claims 26-29 and 32 can be found in claims 18-22 and 25. See the Examiner's comments regarding claims 18-22 and 25.

As to claims 30-31, the subject matter in claims 30-31 can be found in claims 23-24. See the Examiner's comments regarding claims 30-31.

Conclusion

6. **Any response to this office action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314, (for formal communications intended for entry)

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(for informal or draft communications, please label

"PROPOSED" or "DRAFT")


Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA.,
Sixth Floor (Receptionist).

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Ngoc-Yen Vu** whose telephone number is (703) 305-4946. The examiner can normally be reached on Mon - Fri from 8 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Wendy Garber**, can be reached on (703) 305-4929.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the customer service office whose telephone number is (703) 306-0377.

NYV
02/07/2003


NGOC-YEN VU
PRIMARY EXAMINER
Group Art Unit 2612